Atty. Dkt: TAIW 487

AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

- (Currently amended) A method for correcting skew images comprising the steps of:
 - (a) detecting a plurality of edge areas on an image, each of the edge areas having an edge;
 - (b) calculating a plurality of gradient angles of the edge areas, and determining a predominant angle from among to sum up weightings of the calculated gradient angles; and
 - (c) rotating the image according to the <u>predominant</u> gradient angle with the highest weighting;

wherein the edge represents that the maximum display difference in each of the edge areas is larger than a threshold.

- (Currently amended) The method of claim 1, wherein the edge areas are determined by the steps of:
 - (i) grouping the image into a plurality of blocks, each of the blocks having N*N pixels, wherein N is an odd number except other than 1;
 - (ii) grouping the pixels into a plurality of pixel groups according to a plurality of grouping angles;
 - (iii) calculating the display differences between the adjacent pixel groups according to each of the grouping angles;
 - (iv) confirming that the maximum display difference is larger than the

AMENDMENT -3- 10/689,033

Atty. Dkt: TAIW 487

threshold; and

- (v) defining the blocks with the edges as the edge areas.
- 3. (Original) The method of claim 2, wherein the blocks are grouped into the pixel groups by the grouping angles of 0°, 45°, 90° or 135° to a horizontal coordinate axis.
- 4. (Original) The method of claim 2, wherein the display difference is the difference of display parameter sums between any two of the adjacent pixel groups.
- (Original) The method of claim 4, wherein the display parameter sum is the sum of the display parameters of the pixels included in each of the pixel groups.
- 6. (Original) The method of claim 5, wherein the display parameter is a luminance value or a chrominance value of each of the pixels.
- 7. (Original) The method of claim 1, wherein the display difference is a luminance difference or a chrominance difference.
- 8. (Currently amended) The method of claim 1, further comprising a confirming step performed after step (b), the confirming step confirming that the <u>plurality</u> of gradient angles are in a predetermined range.
- 9. (Original) The method of claim 8, wherein the range is between -89° to 89°.
- 10. (Original) The method of claim 9, wherein the optimal range is between -45° to 45°.
- 11. (Original) The method of claim 1, further comprising a step of outputting a caution message.
- 12. (Original) The method of claim 1, further comprising a step of adjusting the boundaries of the image after rotated.

AMENDMENT -4- 10/689,033

Atty. Dkt: TAIW 487

13. (Currently amended) The method of claim 1, wherein the gradient angles is are calculated by using Sobel operators.

AMENDMENT -5- 10/689,033